

CLAIMS

WE CLAIM AS OUR INVENTION:

1. A communications device for controlling operation of an unmanned locomotive over a track layout in a train yard, said locomotive operable over a plurality of alternative track routes to reach a respective destination from a plurality of possible destinations in said track layout, said track layout including a plurality of switches configured to alter a route for a locomotive running along said track layout, said communications device comprising:

a first user display for use in commanding a desired destination for the locomotive within said track layout by setting the state of the switches along the route to the destination; and

a second user display for use in controlling movement of the locomotive along said track layout.

2. The device of claim 1 wherein the displays are made on a single display device having first and second modes of operation.

3. The device of claim 1 wherein the displays are made on two display devices, one for each display.

4. The device of claim 1 wherein the second display is made on a graphic user interface enabling data input from the operator.

5. A communications device for controlling operation of an unmanned locomotive over a track layout in a train yard, said locomotive operable over a plurality of alternative track routes to reach a respective destination from a plurality of possible destinations in said track layout, said track layout including a plurality of switches configured to alter a route for a locomotive running along said track layout, said communications device comprising:

a user display enabling an operator to command a desired destination for the locomotive within said track layout by setting the state of the switches along the route to the destination without intervention from other personnel.

6. A communications device for controlling operation of an unmanned locomotive over a track layout in a train yard, said locomotive operable over a plurality of alternative track routes to reach a respective destination from a plurality of possible destinations in said track layout, said track layout including a plurality of switches configured to alter a route for a locomotive running along said track layout, said communications device comprising:

a graphical user interface for commanding a desired destination for said locomotive within said track layout, said graphical user interface configured to display a representation of said track layout, and wherein said representation allows an operator to monitor operational conditions of the switches that may develop along the route of the locomotive.

7. A communications device for controlling operation of an unmanned locomotive over a track layout in a train yard, said locomotive operable over a plurality of alternative track routes to reach a respective destination from a plurality of possible destinations in said track layout, said track layout including a plurality of switches configured to alter a path for a locomotive running along said track layout, said communications device comprising:

a user display for commanding a desired destination for the locomotive within said track layout, said user display responsive to a verification message indicative of whether a switching combination for the locomotive route for reaching the desired destination has been executed.

8. A system for routing a locomotive through a track layout comprising a plurality of rail tracks connectable to one another in response to a respective switching combination applied to a plurality of remotely controlled switches for interconnecting one track to another track, said system comprising:

a communications device for commanding a desired destination for said locomotive within said track layout; and

a yard control system responsive to the commanded desired destination, said yard control system coupled to a database comprising data indicative of at least one route for reaching the desired destination, said yard control system configured to generate a switching combination applied to respective ones of the plurality of remotely controlled switches to implement said at least one route, said yard control system configured to communicate to said communications device confirmation information regarding said at least one path and said alternative path, if any, for reaching the desired destination.

9. The system of claim 8 wherein the commanded desired destination from the communications device is transmitted to the train yard control system via communications equipment onboard the locomotive.

10. The system of claim 9 wherein the confirmation from said yard control system is transmitted to the communications device via communications equipment onboard the locomotive.

11. The system of claim 8 wherein said database further comprises data indicative of at least one alternative path for reaching the desired destination in the event said at least one path for reaching the desired combination is unavailable.

12. The system of claim 11 wherein said yard control system is configured to communicate to said communications device confirmation information regarding said alternative path, if any, for reaching the desired destination.